

11. The method of claim 10 wherein the boron compound includes B_2O_3 , H_2BO_3 or BF_3 .

12. (Amended) A method of manufacturing a negative electrode for a rechargeable lithium battery comprising:

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mixing a negative active material with a compound to form a mixture, the compound comprising elements selected from the group consisting of transition metals, alkaline metals, alkaline earth metals and semi-metals, wherein the amount of the compound is 0.05 to 30 wt %;

adding an organic solvent to the mixture;

coating the resulting mixture on a current collector; and

drying the coated current collector and pressing the dried current collector.

REMARKS

Claims 2 to 6 and 8 to 12, as amended, are pending. Applicant has canceled claims 1 and 7 and amended claims 2 to 4, 6, 8 to 10 and 12. Attached hereto is a marked-up version of the changes made to the claims by the current amendment, which is captioned "**Version with markings to show changes made.**" The amendments find full support in the original specification and claims. No new matter is presented. In view of the above amendments and following remarks, Applicant respectfully requests favorable consideration and a timely indication of allowance.

Rejection Under Section 112, Second Paragraph

The Examiner rejected claims 3 and 10 under 35 U.S.C. § 112, second paragraph, as allegedly indefinite. Specifically, the Examiner objected to the language regarding the nickel hydroxide, calcium oxalate monohydrate, boron compounds and tetraethylene orthosilicate. It appears that the Examiner intended to reject claim 9, which is similar to claim 3, rather than claim 10, because claim 9 contains the language objected to by the Examiner. Applicant has amended claims 3 and 9, thereby obviating the rejection under section 112, second paragraph. However, if the Examiner has a further objection to claim 10, Applicant respectfully requests clarification so that the objection can be properly addressed.

Rejection Under Section 102(e) Over Fujimoto

The Examiner rejected claims 1 to 5 and 7 to 11 under 35 U.S.C. § 102(e) as allegedly anticipated by Fujimoto et al. (U.S. Patent No. 6,132,903). Applicant respectfully traverses this rejection.

Applicant has canceled claims 1 and 7 and amended dependent claims 6 and 12 to incorporate all of the limitations of independent claims 1 and 7, respectively, from which they directly depended. Claims 6 and 12 include the limitation that the amount of the compound is 0.05 to 30 wt %. As acknowledged by the Examiner, claims 6 and 12 are allowable over Fujimoto, as Fujimoto does not teach or suggest the claimed amount of the compound. Accordingly, claims 2 to 6 and 8 to 12 are allowable over Fujimoto, and Applicant respectfully requests that the rejection under section 102(e) over Fujimoto be withdrawn.

Rejection Under Section 102(b) Over Zhong

The Examiner rejected claims 1 to 5 and 7 to 11 under 35 U.S.C. § 102(b) as allegedly anticipated by Zhong (Abstract of Canadian Patent No. 2,198,417). Applicant respectfully traverses this rejection. Applicant is filing herewith an Information Disclosure Statement in which Applicant cites and submits a full copy of Canadian Patent No. 2,198,417.

As discussed above, Applicant has canceled claims 1 and 7 and amended dependent claims 6 and 12 to incorporate all of the limitations of independent claims 1 and 7, respectively, from which they directly depended. As acknowledged by the Examiner, claims 6 and 12 are allowable over Zhong, as Zhong does not teach or suggest the claimed amount of the compound. Further, Zhong discloses that a boron compound is reacted with a carbonaceous compound using heat treatment in an inert atmosphere to prepare a negative active material. (See page 7, lines 20 to 22.) Boron is doped to the resulting active material. Thus, Zhong discloses the reaction product of boron and a carbonaceous compound, whereas the present invention is instead directed to a mixture. For this reason as well the present claims are distinguishable over Zhong. Accordingly, claims 2 to 6 and 8 to 12 are allowable over Zhong, and Applicant respectfully requests that the rejection under section 102(b) over Zhong be withdrawn.

Rejection Under Section 102(b) Over JP 11-302004

The Examiner rejected claims 1 to 4, 6, 7 to 10 and 12 under 35 U.S.C. § 102(b) as allegedly anticipated by JP 11-302004 (Abstract). Applicant respectfully traverses this rejection.

The Examiner states that JP 11-302004 teaches an anode having 0.2 to 5 weight percent boron nitride powder as an additive for the carbon material in a lithium secondary battery. (Office action at 3.) In fact, JP 11-302004 discloses a "boron nitride powder containing 0.2 to 5 weight percent of carbon". JP 11-302004 nowhere teaches or suggests that the amount of the (boron) compound is 0.05 to 30 wt %, as presently claimed. Accordingly, JP 11-302004 similarly fails to teach or suggest the claimed invention. Applicant therefore respectfully requests that the rejection over JP 11-302004 be withdrawn.


Conclusion

In view of the foregoing amendments and remarks, Applicant submits that pending claims 2 to 6 and 8 to 12, as amended, are in condition for allowance, and a timely indication of allowance is respectfully requested. If there are any remaining issues that can be addressed by telephone, Applicant invites the Examiner to contact the undersigned at the number indicated below.

Respectfully submitted,

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